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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/500,897	02/09/2000	Shunpei Yamazaki	SEL 161	3195

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Mark J Murphy
Cook Alex Mcfarron Manzo Cummings & Mehler LTD
200 West Adams Street Suite 2850
Chicago, IL 60606

EXAMINER	
MISLEH, JUSTIN P	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/500,897	YAMAZAKI ET AL.	
	Examiner	Art Unit	
	Justin P. Misleh	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 3, and 32 - 65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3, and 32 - 65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9-11-06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 August 2006 has been entered.

Response to Arguments

2. Applicant's arguments filed 11 August 2006, in view of the 35 U.S.C. 112, 1st paragraph enablement rejection, have been fully considered and are persuasive. The 35 U.S.C. 112, 1st paragraph enablement rejection of the claims has been withdrawn.

3. Applicant's arguments filed 11 August 2006 with respect to Takahara (US 6,219,113 B1) and with respect have been considered but are moot in view of the new grounds of rejection.

Claim Objections

4. In view of Examiner's interpretation of **Claims 42 – 47 and 60 – 65** (see 35 U.S.C. 112, 1st paragraph rejection below), these claims are objected to under 37 CFR 1.75 as being a substantial duplicates of **Claims 36 – 41 and 54 – 59**, respectively.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claims 42 – 47 and 60 – 65** are again rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

7. **Independent Claims 42 and 6**0 and their respective dependent claims appear to be directed to towards features of Applicant's invention disclosed in the Fifth (figures 7A and 7B), Sixth (figures 12A and 12B), and Seventh (figures 13A and 13B) Embodiments.

8. Accordingly, the claims each recite, therein, "a passivation film formed over the thin film transistor ... a first electrode formed over the passivation film;" however, Applicant's Fifth – Seventh embodiments shows that the "passivation film 6003" is formed over the "thin film transistor 4023" such that the only items formed over the "passivation film 6003" are the "adhesive filler 6004" and the "cover member 6000". In fact, none of Applicant's embodiments show "a first electrode formed over the passivation film."

9. For the purposes of Examination, the Examiner will interpret all instances of "passivation film" in Claims 42 – 47 and 60 – 65 as "planarizing film," which is in accordance with the disclosed invention.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. **Claims 1, 3, 32, 33, and 48 – 51** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al. (US 5,550,066) in view of Nishiguchi (US 6,046,787).

Examiner Note

As stated in the MPEP § 2111.02 (please see also Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 – CCPA 1951), if the preamble of the claim neither recites the limitations of the claim nor is necessary to give life, meaning, and vitality to the claim; then the preamble of the claim is not served to further define the structure of the claim.

In regards to independent **Claims 1 and 48**, "a camera" and "a camera having a view finder," which are in the respective preambles, neither recite the limitations of the claim nor are necessary to give life, meaning, and vitality to the claims. Accordingly, the preamble of Claims 1 and 48 are not given any patentable weight.

12. For **Claims 1 and 48** (please see rejections), Tang et al. disclose, as shown in figure 8 and as stated in column 6 (line 49) – column 7 (line 47), an electroluminescence display device comprising:

a substrate (41) having a first surface (upper surface – towards top of figure) and a second surface (lower surface – towards bottom of figure) wherein the second surface is on an opposite side of the substrate with respect to the first surface (clearly seen in figure 8);

a thin film transistor (formed over "polysilicon island" – also see figure 2) formed over the first surface of the substrate (see elements 6KA; 3KA; and said island in relation to substrate 41 – clearly formed over substrate);

a planarizing film (52) formed over the thin film transistor (see column 7, lines 17 – 19);

a first electrode ("anode electrode" – 72) formed on the planarizing film (52) and electrically connected to the thin film transistor (see column 7, lines 25 – 29);

an emission layer (82) formed over the first electrode (72);

a second electrode ("top electrode" – 84) formed over the emission layer (see column 9, lines 57 – 60).

However, Tang et al. do not disclose wherein the second surface of the substrate has a spherical configuration which acts as a lens.

On the other hand, Nishiguchi also disclose a display device having a substrate with two opposing surfaces. Specifically, Nishiguchi teaches, in figure 7, a display device (131) having a substrate (101b) with a first surface (towards the left-side of the figure) and an opposing second surface (towards the right-side of the figure). Nishiguchi further teaches, in figure 7 and in column 20 (lines 1 – 30), wherein the second surface of the substrate has a spherical configuration which acts as a lens.

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included a feature wherein the second surface of the substrate has a spherical configuration which acts as a lens (as taught by Nishiguchi et al.) in the electroluminescence display device (disclosed by Tang et al.) for the advantage of *ensuring*

increased width of viewing in left/right directions of an image viewing zone (see column 6, lines 64 – 67).

13. As for **Claims 3 and 49**, Tang et al. disclose, as stated in column 4 (lines 15 – 20), wherein said emission layer (82) comprises an organic electroluminescence material.

14. As for **Claims 32 and 50**, Tang et al. disclose, as stated in column 9 (lines 50 – 57), wherein said emission layer (82) comprises an inorganic electroluminescence material.

15. As for **Claims 33 and 52**, Tang et al. disclose a planarizing film (52) formed over the thin film transistor (see column 7, lines 17 – 19); however, Tang et al. do not disclose wherein the planarizing film comprises a resin.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of a *planarizing film comprising a resin* are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have a provided a planarizing film comprising a resin for the advantage of *(1) easiness of film formation; (2) easiness in film thickening; (3) low parasitic capacitance; and (4) excellent flatness.*

16. **Claims 34, 35, 52, and 53** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al. (US 5,550,066) in view of Nishiguchi (US 6,046,787) in further view of Takahara (US 6,219,113 B1).

17. As for **Claims 34, 35, 52, and 53**, Tang et al. (as modified by Nishiguchi) disclose, as shown in figure 8, an electroluminescence display device; however, Tang et al. is silent with respect to providing the display device in a video/digital camera or in a viewfinder of a video/digital camera.

On the other hand, Takahara also disclose an electroluminescence display device display device. Specifically, Takahara teaches, in figures 218 – 225 and as stated in columns 3 (lines 33 – 41), 4 (lines 1 – 14), 54 – 57, 122, and 124, an electroluminescence display device. Takahara further teaches, in figures 218 – 225 and in column 122 (line 37) – column 124 (line 40), providing the electroluminescence display device in a video/digital camera or in a viewfinder of a video/digital camera.

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included the electroluminescence display device in a video/digital camera or in a viewfinder of a video/digital camera (as taught by Takahara) in the electroluminescence display device (disclosed by Tang et al. – as modified by Nishiguchi) for the advantage of providing a *display device with a wide view angle and faster response speed.*

18. **Claims 36 – 39, 42 – 45, 54 – 57, and 60 – 63** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al. (US 5,550,066) in view of Hamada (US 6,114,715) in further view of Nishiguchi (US 6,046,787).

Examiner Note

As stated in the MPEP § 2111.02 (please see also Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 – CCPA 1951), if the preamble of the claim neither recites the limitations of the claim nor is necessary to give life, meaning, and vitality to the claim; then the preamble of the claim is not served to further define the structure of the claim.

In regards to independent **Claims 36, 42, 54, and 60**, "a camera" and "a camera having a view finder," which are in the respective preambles, neither recite the limitations of the claim nor

are necessary to give life, meaning, and vitality to the claims. Accordingly, the preamble of Claims 36, 42, 54, and 60 are not given any patentable weight.

19. For **Claims 36, 42, 54, and 60** (please objections and rejections above), Tang et al. disclose, as shown in figure 8 and as stated in column 6 (line 49) – column 7 (line 47), an electroluminescence display device comprising:

a substrate (41) having a first surface (upper surface – towards top of figure) and a second surface (lower surface – towards bottom of figure) wherein the second surface is on an opposite side of the substrate with respect to the first surface (clearly seen in figure 8);

a thin film transistor (formed over "polysilicon island" – also see figure 2) formed over the first surface of the substrate (see elements 6KA; 3KA; and said island in relation to substrate 41 – clearly formed over substrate);

a planarizing film (52) formed over the thin film transistor (see column 7, lines 17 – 19);

a first electrode ("anode electrode" – 72) formed on the planarizing film (52) and electrically connected to the thin film transistor (see column 7, lines 25 – 29);

an emission layer (82) formed over the first electrode (72);

a second electrode ("top electrode" – 84) formed over the emission layer (see column 9, lines 57 – 60).

However, Tang et al. do not disclose (a) wherein the thin film transistor has an LDD region and a gate electrode partly overlapping the LDD region; and (b) wherein the second surface of the substrate has a spherical configuration which acts as a lens.

In regards to item (a), Hamada also disclose a electroluminescence display device having a thin film transistor. Specifically, Hamada teaches, in figure 8, a electroluminescence display

device (41) having a thin film transistor (43). Hamada further teaches, in figure 8 and in column 7 (line 62) – column 8 (line 41), wherein the thin film transistor (41) has an LDD region and a gate electrode (46) partly overlapping the LDD region (clearly seen in figure 8).

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included a feature wherein the thin film transistor has an LDD region and a gate electrode partly overlapping the LDD region (as taught by Hamada) in the electroluminescence display device (disclosed by Tang et al.) for the advantage of *increasing the ON/OFF ratio of the TFT and to suppress leak current in the OFF state* (see column 9, lines 17 – 20).

In regards to item (b), Nishiguchi also disclose a display device having a substrate with two opposing surfaces. Specifically, Nishiguchi teaches, in figure 7, a display device (131) having a substrate (101b) with a first surface (towards the left-side of the figure) and an opposing second surface (towards the right-side of the figure). Nishiguchi further teaches, in figure 7 and in column 20 (lines 1 – 30), wherein the second surface of the substrate has a spherical configuration which acts as a lens.

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included a feature wherein the second surface of the substrate has a spherical configuration which acts as a lens (as taught by Nishiguchi et al.) in the electroluminescence display device (disclosed by Tang et al. – as modified by Hamada) for the advantage of *ensuring increased width of viewing in left/right directions of an image viewing zone* (see column 6, lines 64 – 67).

20. As for **Claims 37, 43, 55, and 61**, Tang et al. disclose, as stated in column 4 (lines 15 – 20), wherein said emission layer (82) comprises an organic electroluminescence material.

21. As for **Claims 38, 44, 56, and 62**, Tang et al. disclose, Tang et al. disclose, as stated in column 9 (lines 50 – 57), wherein said emission layer (82) comprises an inorganic electroluminescence material.

22. As for **Claims 39, 45, 57, and 63**, Tang et al. disclose a planarizing film (52) formed over the thin film transistor (see column 7, lines 17 – 19); however, Tang et al. do not disclose wherein the planarizing film comprises a resin.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of a *planarizing film comprising a resin* are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have a provided a planarizing film comprising a resin for the advantage of *(1) easiness of film formation; (2) easiness in film thickening; (3) low parasitic capacitance; and (4) excellent flatness.*

23. **Claims 40, 41, 46, 47, 58, 59, 64, and 65** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al. (US 5,550,066) in view of Hamada (US 6,114,715) in view of Nishiguchi (US 6,046,787) in further view of Takahara (US 6,219,113 B1).

24. As for **Claims 40, 41, 46, 47, 58, 59, 64, and 65**, Tang et al. (as modified by Nishiguchi and Hamada) disclose, as shown in figure 8, an electroluminescence display device; however, Tang et al. is silent with respect to providing the display device in a video/digital camera or in a viewfinder of a video/digital camera.

On the other hand, Takahara also disclose an electroluminescence display device display device. Specifically, Takahara teaches, in figures 218 – 225 and as stated in columns 3 (lines 33 – 41), 4 (lines 1 – 14), 54 – 57, 122, and 124, an electroluminescence display device. Takahara further teaches, in figures 218 – 225 and in column 122 (line 37) – column 124 (line 40), providing the electroluminescence display device in a video/digital camera or in a viewfinder of a video/digital camera.

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included the electroluminescence display device in a video/digital camera or in a viewfinder of a video/digital camera (as taught by Takahara) in the electroluminescence display device (disclosed by Tang et al. – as modified by Nishiguchi and Hamada) for the advantage of providing a *display device with a wide view angle and faster response speed.*

Cited Prior Art

25. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure because:

Each of **Tang et al. (US 5,684,365); Shibata et al. (US 6,147,451); Kuribayashi et al. (US 6,175,345 B1); and Kuribayashi et al. (US 6,215,244 B1)** disclose an organic electro-luminescence (EL) display device having a thin film transistor (TFT), a planarizing (insulating) film; and a passivation film (layer).

Conclusion

26. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Vivek Srivastava can be reached on 571.272.7304. The fax phone number for the organization where this application or proceeding is assigned is 571.273.3000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
October 28, 2006

VIVEK SRIVASTAVA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600